

Hidden Environmental Issues – Biodiversity Loss

In this day and age, you can never escape the talk of climate change and plastic pollution – and for good reason. Although these two issues are the most well-known, there are many more that are just as pressing, and are affecting our environment just as much every day. Globally, there have been immense efforts put into making our planet a better place, for example, the Sustainable Development Goals address the global challenges we face such as inequality, poverty, climate change, and other environmental issues that require a global effort to solve. Yet, many problems are left unknown to Generation Z, who will be fixing these issues.

Many young people are only exposed to mentions and acknowledgements of environmental damage through their family, the news, and fleeting nods to the problems it may be causing during conversation. The issue with this is that young people are the ones who will be inheriting our broken and ruined planet, it is their job to begin solving the environmental issues prevalent in society; and if they hardly know about the full range of eco-challenges we are facing, how are they meant to do this? It is vital to educate our young people on the unknown problems that are equally important.

An especially significant, yet hidden, issue was brought to the light by David Attenborough's film: 'A Life on Our Planet'. In this captivating documentary, he talks about a decrease in biodiversity. Biodiversity is the biological variety amongst living organisms, and the loss of it is happening shockingly fast. Sustainable Development Goal 15 is focused around preserving and restoring ecosystems and halting biodiversity loss, yet despite the immense efforts of the world leaders, it won't be enough unless we all educate ourselves, and do our bit.

When I asked 30 people aged 16 and younger whether they knew what biodiversity loss was, 23 said they had heard of it, however, could not tell me anything about the consequences associated with it, or what its effects truly were. 5 said they had a general understanding of it and could tell me some facts, and only 2 had a deep and complete understanding. So, if you're one of the 23 people who has no idea about biodiversity loss, listen up! You're about to learn all about it.

Biodiversity loss is prevalent all around the world: in the vast oceans, in the beautiful Amazon rainforest, in Europe's woodland forests; even here, native bush is being turned into farmland, and wide plains, providing no space for native birds to live. The fine balance of the ecosystem has decreased significantly since 2000, including NZ birds' lush and diverse habitats, which used to give them space to mate, raise young, and live long and fulfilling lives. Here are some statistics for you: from 2000 to 2020, New Zealand has had a 12% decrease in tree cover – losing 12,900 square meters of native bush. If you thought that was bad, the Amazon Rainforest has lost 13,235 square **kilometers** of forest in **only** 2020-2021. So, why is this such a big issue?

If we look at rainforests specifically, the biodiversity they hold is the key to keeping the ecosystem upright. Birds, mammals, and insects can only flourish if the plants around them flourish too. When the naturally varied vegetation around these animals is cut down, and rows upon rows of oil palms are planted, significantly less animals can survive in a plantation of only one plant ("monoculture"). If these animals can't survive, not only does it send the entire ecosystem crumbling; it also has shocking effects on our lives.

To begin, the oil palm industry is one of the most environmentally damaging industries in the world today. Why? Let's take the orangutan as an example. These apes are essential for seed dispersal, and without them, the future generations of trees would be at risk. However, the numbers of orangutans in the rainforest are decreasing dizzyingly fast, all due to the deforestation and loss of their natural habitat. They find themselves fighting for survival in the kilometers of oil palms that don't bear enough of the correct fruit they need to feed on. Therefore, they cannot disperse many seeds – and just like that, over 400 tree species struggle to survive.

So why do we need this variety in our rainforests? The answer is quite simple. Without diversity, animals and plants cannot survive, tree numbers decrease, meaning carbon isn't being absorbed at the rate it should be. Without trees, and healthy soil, rain cannot be absorbed, causing floods. In addition, animals and plants may have medical benefits we haven't yet discovered; and how will we ever discover them if there is nothing left of the millions of species found in just the rainforests?

Now, there's not much you can do to help the Amazon Rainforest specifically; however, you can do little things such as: ensuring food you buy doesn't contain palm oil and is sustainably sourced, planting native trees, recycling and

composting food scraps, and especially making others aware of the problems our planet is facing. I hope you learned something from this article and thank you for taking the time to read it: educating yourself is the easiest solution to slowing the effects of environmental damage.

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An image showing a monoculture of oil palms on the left/foreground and the natural, diverse rainforest on the right/background.

Image from:

<https://www.foodnavigator-asia.com/Article/2014/03/20/Orkla-the-latest-major-to-pledge-more-sustainable-palm-oil-sourcing>



An image showing the effects of deforestation on the left and lush vegetation on the right.

Image from:

https://rainforests.mongabay.com/amazon/amazon_destruction.html

Bibliography and Citations

- David Attenborough: A Life on Our Planet (2020)
 - Trailer: <https://www.youtube.com/watch?v=64R2MYUt394>
- Donovan Alexander (Jun 25, 2020):
<https://interestingengineering.com/science/9-ways-to-prevent-biodiversity-loss-and-what-causes-it>
- United Nations, Sustainable Development Goals:
<https://sustainabledevelopment.un.org/topics/biodiversityandecosystems#:~:text=The%20Sustainable%20Development%20Goal%2015,degradation%20and%20halt%20biodiversity%20loss%E2%80%9D.>
- Chloe Taylor (Nov 19, 2021):
<https://www.cnbc.com/2021/11/19/deforestation-in-brazils-amazon-rainforest-hits-15-year-high.html>
- Global Forest Watch:
<https://www.globalforestwatch.org/dashboards/country/NZL/?category=forest-change&location=WyJjb3VudHJ5IiwilpMlI0%3D&map=eyJjZW50ZXliOnsibGF0IjotNDEuOTg3OTUwODg2NjgyODgsImxuZyI6MC4xMTk0MzgxNzUwMDA5NDcxOH0sImNhbkJvdW5kljpmYWxzZSwiZGF0YXNldHMiOlt7ImRhdGFzZXQiOiJwb2xpdGJjYWwtYm91bmRhcmllcyIsImxheWVycyl6WyJkaXNwdXRlZC1wb2xpdGJjYWwtYm91bmRhcmllcyIsInBvbGl0aWNhbC1ib3VuZGFyaWVzIl0sImJvdW5kYXJ5Ij0cnVILCjVjGFjaXR5IjoxLCJ2aXNpYmlsaXR5Ij0cnVlSx7ImRhdGFzZXQiOiJ0cmVILWNvdmVyLWxvc3MiLCJ5YXllcnMiOlsidHJlZS1jb3Zlci1sb3NzIl0sIm9wYWNpdHkiOjEsInZpc2liaWxpdHkiOnRydWUsInBhcmFtcyl6eyJ0aHJlc2hvbGQiOjMwLCJ2aXNpYmlsaXR5Ij0cnVlX1dfQ%3D%3D&showMap=true>
- United Nations, Sustainable Development Goals:
<https://www.un.org/sustainabledevelopment/sustainable-development-goals/#:~:text=The%20Sustainable%20Development%20Goals%20are,environmental%20degradation%2C%20peace%20and%20justice>